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Citation Details

Senior, H., Wu, K., Martin, D. M., & Mellinger, M. (2009). Three times a study: Business students and the library. *Journal of Business & Finance Librarianship*, 14(3), 202-229.

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Three Times a Study: Business Students and the Library

ABSTRACT. Revisiting a study performed 30 years ago, researchers at three institutions surveyed undergraduate and graduate students in marketing courses to determine their attitudes toward and knowledge of library services and collections. Results found that 21st-century students are more likely to believe in the importance of library research, to have had library instruction and to use websites and internet search engines to begin their research. However, they are less likely to read business periodicals. Faced with a list of information sources, they are generally able to pick out a useful resource, although not always the most efficient. Implications for library service to business students are discussed.

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KEY WORDS. Business student library use, library instruction, student attitudes toward library services

INTRODUCTION

In 1974 three business professors undertook a study of their marketing students, probing the students' attitudes toward and knowledge of the library and its resources (Healy, Culley, & Cudd, 1975; Culley, Healy, & Cudd, 1977). Results showed that many students were unable to answer questions about where they would look for a company's financial data. Over a decade later Littlejohn and Benson-Talley (1990) drew on the Culley article (Culley et al., 1977) for inspiration and surveyed faculty and students at the California State University-Long Beach; their results, which will be reported here when relevant, showed that 69% of students fell into the poor-unsatisfactory range when asked to identify appropriate sources to answer a specific business research question. In 2004 Diane Zabel mused in the *Journal of Academic Librarianship* that were the 1975 study (Healy et al., 1975) re-run, it would yield similar results.

Scholars agree that time, innovation and human progress effect can change our experience and understanding of social phenomena through re-inquiries (e.g., Martin, Schouten and McAlexander,

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2006). The study at hand replicates and extends the Healy research and offers implications for the continuing development of library pedagogy for business students.

Collaboration between academic units on college campuses provides students with exceptional educational enrichment and understanding of the role of research in business. Academic libraries have long held formal and informal instruction to the profound benefit of graduate and undergraduate business students. Both library and business education literatures are rife with articles investigating the relationship between business students' information research behavior and academic libraries (e.g., Lee & Read, 1972; Healy, et al., 1975; Littlejohn & Benson-Talley, 1990; Cooney, 2005). Studies in this area fall into four major categories: 1) students' knowledge, use and perception of library resources; 2) library instruction and its impact; 3) faculty and business schools' perception of the importance of information literacy; 4) the relevance of research skills to alumni and employers.

REVIEW OF THE LITERATURE

Students' knowledge, use and perception of library resources

Surveys have been done since the early 1970s on business students' knowledge, use and perception of library resources. Bruner and Lee (1970) surveyed 180 junior and senior business students and found that over 90% rated their research knowledge as "poor" or "very poor." Responding to an open-ended question, 70% of the students could not name one index or abstract that they had recently used. Only 5 students were able to give a complete response to a question asking students how they would look for information on the topic "leadership." The survey conducted by Culley, et al. (1977) also reported that "undergraduate and graduate business students seem to be ill-prepared to use secondary source data for class exercises or research. Moreover, students see little value in obtaining secondary research skills as a means of facilitating academic or career success" (p. 295). This lack of research skills, self-identified or demonstrated, continued through the late 1980's. Hawbaker and Littlejohn (1988) asserted that "many business students graduate from college without a basic understanding of library research or an appreciation of available library or secondary sources" (p. 52).

Students' perception of the value of secondary research skills was related to advanced academic status (Littlejohn & Benson-Talley, 1987). Business students indicate that they appreciated the contributions librarians made to their education. However, it appears that upper division students appreciated librarians more than lower division students. Donaldson (2000) found that even though first year business students responded favorably to an interactive online tutorial on business research, over half of surveyed students were ambivalent about its overall value. Duke (2002) found out that graduating students ranked their ability to search and integrate data sources higher than the lower-division students. Moreover, academic major was a factor in students' attitudes. Compared to students in other majors, business students were found to place higher importance on library use (Parrott, Borgna, & Keeline, 1982).

Faculty and business schools' perception of the importance of information literacy

Creating and implementing effective information literacy programs is an ongoing concern. Important conditions for success include: collaboration with faculty; integration of research into the course; enough time to cover the complexity of research and secondary sources (Hawbaker &

Littlejohn, 1988). Collaboration with faculty entails marketing library instruction to faculty who may need to be convinced that the library has something to offer, and to achieve this goal, librarians need to choose a teaching technique that is energizing to both the librarian and the students (Jacobson, 1993). Cooney (2005) asserted that “business information literacy instruction, while widespread and prevalent, is still developing,” and that “collaboration between librarians and business faculty is overwhelmingly described as moderate” (p. 3).

Information literacy is also recognized in business education. There was some movement in AACSB (The Association to Advance Collegiate Schools of Business) to include bibliographic instruction as a means to improve academic quality in business schools (Hawes, 1994). Currently, however, although AACSB standards incorporate the idea of information literacy, they don't explicitly state “library research skills,” but rather, focus on the use of information technologies and systems (A. Roberts, personal communication, July 30, 2007). Some librarians have taken bibliographic instruction to a new level by infusing critical thinking and research skills, emphasizing the importance of synthesizing information in addition to gathering information (Henninger & Hurlburt, 1996).

Some business faculty realized the importance of information literacy and tried to integrate it into the business curriculum. Burger and Schmidt (1987) described a market research course adopting a new approach of having students work with real business clients and integrating information management into the course design. Sterngold and Hurlbert (1998) gave a 6-week assignment to students to improve their information literacy skills. According to the authors, information literacy has three components: technical, reflective (analytical/evaluative), and professional (being able to speak the profession's language).

Library Instruction for Business Students

Research reveals mixed results from bibliographic instruction efforts. Feast (2003) reported many obstacles in integrating information literacy skills into student learning practices in business courses. Library staff with information literacy training and those without showed no significant differences in teaching practices, and the author concluded that the main inhibiting factors included the lack of time, lack of resources, and lack of desire to change.

Multiple studies have shown that business students have a strong preference for electronic resources over print, and free Web resources over library resources (e.g., Atkinson & Figueroa, 1997; Morrison, Kim, & Kydd, 1998). Lombardo and Miree (2003) found that library instruction doesn't necessarily change the perception that free Web resources are easier to use than library resources, although students did have a more favorable attitude towards print when librarians could demonstrate the unique value of print resources.

Bibliographic instruction can have markedly positive results. A study done by Lee and Read (1972) revealed that among graduate business students who had taken a business research course, two-thirds rated their research ability good to excellent while one-third rated it poor to very poor; in those that had not taken the course these proportions were reversed. Korobili and Tilikidou (2005) found that the use of library resources by Greek marketing students is correlated with prior attendance at a library-research class. Prince and Helms (1993) concluded that an integrated library instruction session reduces library anxiety, increases students' ability to use library resources, and strengthens the relationship between library staff and students. Similar findings were also reported by Rutledge and Maehler (2003). Clearly, positive outcomes result from effective library pedagogy.

The relevance of research skills to alumni and employers.

The value of research skills is evident among businesspeople. Davis, Misra and Van Auken (1996) found that alumni rated the importance of using database packages in a marketing context significantly higher than their actual level of preparation, indicating that they were less prepared in this area. Klusek and Bornstein (2006) analyzed the job profiles on the Department of Labor's O*Net database and found that "information literacy skills are in fact valued in the workplace and are an integral part of the work activities" (p. 3). When students move from the classroom to the workplace, research skills become a more important part of their daily life. However, research also showed that practitioners placed less emphasis on secondary research but more on primary data (Stern & Tseng, 2002).

Efforts to create successful research skills and information literacy programs for business school students have clearly developed since the bleak assessment in 1975 (Healy et al., 1975). The question remains: to what extent have the outcomes of these efforts improved students' understanding of how to access information using the research skills they've developed in their university education?

METHODS

Instrument

The instrument included five aspects of student interaction with the library. While items indicative of Healy, et al.'s 1975 study make up the heart of this instrument, additional items investigated library usage, usage frequency, knowledge of resources, business periodical reading and preferred reading contexts (i.e., print, on-line; in the library, outside of the library). For each construct, respondents were given the option of "don't know" along with progressive dimensions along an interval scale.

First, respondents were asked to report how often they encountered particular library-related situations. Possible responses ranged from "daily" (1) to "never" (5) or don't know (6). The second section measured students' frequency of business-related library database use; the list of databases varied by institution. Frequency was assessed along a continuum from "at least half the time" (1) to "never" (4). Students were also asked to describe their attitudes toward library research. Response options ranged from "strongly disagree" (1) to strongly agree (5). A third section asked how often students read certain major business periodicals; response options ranged from "never heard of" (1) to "browse every issue" (4). Students responded to questions about their preferred reading contexts using nominal scales offering options ranging from "print copy in the library" to "I don't read this publication." Demographic information included students' academic status, year in school, and academic major. A copy of the instrument used at the University of Portland is attached as an appendix. The appendix version lists that institution's business databases, but in all other respects the instruments were the same.

Data Collection and Analysis

Surveys were collected at three different universities in Oregon: the University of Portland (private), Portland State University (urban public), and Oregon State University (land grant).

The University of Portland (UP) is a largely residential school with approximately 3,000 FTE, of

which 431 undergraduates and 132 graduates were enrolled in the business school in spring 2006 when the study was performed. With the exception of lab sections for the school's introductory course, all classes are taught by full-time faculty. The student-faculty ratio is 13:1.

The School of Business Administration (SBA) at the Portland State University (PSU) is the largest business school in the Northwest, with nearly 3000 undergraduates and 475 graduate students. PSU is considered a commuter school, with a large population of non-traditional students. The 2006-2007 PSU student statistical profile shows that the average age for undergrads is 25.6, and 33.4 for graduate students, and nearly half of the students are going to school part-time. As of Fall 2002, SBA has a 40 tenure-track faculty and 17 full-time fixed-term faculty. Courses are taught by both tenure-track and fixed-term faculty. Class size varies. Some entry-level required courses (e.g., BA 101) can hold up to 60 students, while most sophomore to senior-level courses limit class size to 45.

In Spring 2006 business students at Oregon State University (OSU) numbered 2,124 undergraduates and 62 graduates, out of a total population of 17,491. The majority of undergraduate business majors live on campus, and undergraduate business courses are taught by both full-time faculty and adjunct instructors. The student-faculty ratio is 19:1.

Surveys were customized to reflect each library's list of business-related library databases. Otherwise, lists of periodicals and multiple-choice options were standardized among the three sites.

Data collection methods varied among the three sites. At the University of Portland, the librarian visited each marketing class, explained the process including students' right to decline to participate, and stayed in the classroom while students filled out the survey. Surveys at Portland State University were distributed by either the librarian or the teaching faculty. At Oregon State, surveys were distributed by faculty, in one business class. Researchers collected 436 surveys; 157 from the University of Portland, 218 from Portland State and 61 from Oregon State. Data analysis included descriptive and inferential statistics.

Sixty-four percent of respondents attended one of the public institutions. Approximately three-quarters (n = 329) of the respondents were undergraduates, mostly juniors and seniors. Nearly half of the participants reported being at their institution for two years or less. Twenty-two percent (n = 95) transferred from another university. International students made up 7% (n = 30) of the sample. Non-business majors often take marketing classes and 16% of respondents (n = 69) represented 23 majors outside the institutions' business schools. Twenty-five percent (n = 107) of the sample were graduate students. Age, gender and ethnicity information was not collected.

RESULTS

Library Use and Instruction

Respondents used their libraries for both academic and social reasons. Twenty percent of students (n = 85) report using the library for non-academic purposes frequently, i.e., daily or weekly. Sixteen percent (n = 71) said they used the library for non-academic purposes monthly while 62% of students (n = 273) said they used it once a year or never. The remainder failed to respond.

Sixty percent (n = 260) of respondents said they had taken a course including library instruction at least once a year, 20% (n = 88) had never had library instruction, and nearly 4% (n = 16) reported they did not know what library instruction is. Sixteen percent (n = 69) reported experience with daily, weekly, or monthly library instruction. Students apparently find the instruction helpful; only 8.4% (n = 36) of all respondents agreed with the statement that projects requiring use of the library were a waste of time.

Preferring Online Materials: Physical vs. Online Resources

Over 50% of students in the current study (n = 222) reported using the library catalog only once a year or never, or stated that they did not know what the library catalog was. Similarly, 82% (n = 357) selected the same categories regarding the consortial catalog (Summit) shared by the three institutions with 30 other members. Thirty-three percent (n = 142) checked out library materials at least monthly. In the current study interlibrary loan use was likewise infrequent: 62% (n = 268) had never used the service. Moreover, over 10% (n = 44) were unaware of the interlibrary loan service.

Faculty Encouragement and Support for Library Use

Asked whether business faculty encourage the use of the library and its services, 71.6% (n = 307) of all respondents, and 73% of undergraduates, agreed while 10% (n = 43) disagreed. The current study also examined the frequency of faculty encouragement. 80% (n = 348) of students said their professors encouraged them to use library resources at least monthly, while 16% (n = 70) said their professors reminded them to use the library at least yearly.

Insert Table 1 here

Business Databases as an Under-used Resource

Students were asked how often they consulted certain business databases, selecting from “at least half the time,” “sometimes,” “rarely,” “never,” and “don’t know what this is.” This list varied by institution, so that data will be reported here for only those four databases owned by all institutions; those four databases are EBSCO’s Business Source Premier; :LexisNexis’ LexisNexis Academic; Proquest’s Wall Street Journal; and Stat-USA from the U.S. Department of Commerce. Between 30% and 40% (n = 146, 150, 163) of respondents reported never using the first three databases, and nearly two-thirds (n = 276) reported never using the fourth. Complete results are presented in table 2.

Insert Table 2 here

Knowing the Importance of Using the Library

The survey also asked students to tell the researchers how much they agreed or disagreed with particular statements about research. Asked whether “knowing how to use the library is necessary for academic success,” 76.9% (n = 333) of respondents agreed, while 13.6% (n = 59) disagreed and 9.5% (n = 41) had no opinion. Students were less sanguine about the relationship between knowing how to use the library and career success, with 49.1% (n = 213) agreeing to a positive connection, 23.5% (n = 102) disagreeing, and 27.4% (n = 119) with no opinion. And when asked to respond to the statement, “businesspeople rarely use the library as an information source,” 47.8% (n = 206) disagreed; 15.6% (n = 63) agreed, and 37.6% (n = 162) had no opinion.

In the current study 43.9 % (n = 189) of respondents had no opinion on the statement, “those who use the library usually have better grades than those who don’t.” Of those with an opinion, slightly more agreed, 29% (n = 125), than disagreed -- 27.1% (n = 117). More data from this survey section can be found in table 3. Students were reluctant to say that business students knew more about using the library than other majors, perhaps due to lack of knowledge of other majors’ library use. Only

12% of respondents (n = 52) agreed with this statement; 43.6% (n = 189) disagreed with the concept, while 44.3% (n = 192) had no opinion.

Insert Table 3 here

Declining Business Periodicals Reading

Students were asked to describe their reading habits for eight business-related, three general, and one purposely fictitious periodical (“*Marketing Professional*”), choosing from a list nearly identical to that used by the 1975 researchers. More than 50% of respondents either said they had never heard of, or heard of but never read, every business-related publication except for two: the *Wall Street Journal*, which 72.8% (n = 313) claimed either to browse occasionally or to read every issue; and *Business Week*, which 57.9% of respondents (n = 250) read at least occasionally.

The least known of the business publications was *Advertising Age*; 69.7% of students (n = 294) had never heard of it, followed by the bogus title with 56% (n = 241) and two business-related journals, *Journal of Advertising Research* (52.6%, n = 226) and *Journal of Marketing* (50.7%, n = 218). Adding “heard of but never read” to “never heard of”, the results are discouraging. Ninety-two percent of respondents (n = 388) are unaware or do not read *Advertising Age*, compared to 92.6% for the *Journal of Advertising Research* and 94% for the *Journal of Marketing*. Please see table 4 for additional statistics.

Insert Table 4 Here

Students Can Identify Sources to Answer Questions

Both the current and 1976 studies asked students where they would go to answer specific research questions. Healy, et al. asked students to provide their own answers, finding that “over 59% had no idea” (1975, p. 631) where to search. In the study at hand, the researchers offered students a list of plausible sources, some more efficient than others, and asked them to select the best answer from the list. “I don’t know” and “Other” were also options. When choosing “Other,” the Internet search engine Google was the most frequent answer entered in all cases.

Asked where they would look for the name of a marketing manager at a major manufacturing firm, 46.4% (n = 199) of respondents said their first stop would be the firm website. Perhaps thinking of the company reports within Business Source Premier, 25.2% (n = 108) of students said they would use that database. The next-most common answer was “I don’t know,” with 16.6% (n = 71).

For the population of Portland, Oregon, students were asked to select from the city website, the U.S. Census Bureau, or an almanac. Respondents were more confident with this question; only 2.1% (n = 9) said they did not know where to look. The majority, 53.8% (n = 229), chose the U.S. Census Bureau and 31.2% (n = 133) the city website, while 2.8% (n = 12) would look in the print source and 10.1% (n = 43) would look elsewhere.

Healy, et al. (1975) and the current study asked students where they would look for balance sheet or other specific information on a company or companies. While students in the study at hand were able to select an answer from the provided list, they were fairly evenly divided in their choices and did not necessarily choose the most efficient option. The company’s website was the top answer, with 35.2% (n = 148) choosing this option; 26.2% (n = 110) would choose Yahoo! Finance, and 25.2% (n = 106) would go to the Securities and Exchange Commission EDGAR database, arguably

the most timesaving source. 9.5% (n = 40) of students said they did not know where to look.

Healy et al. hoped that students would choose “an acceptable source such as *Standard Rate and Data Service*” (1975, p. 631) to find the cost of a one-page, black and white ad in a magazine, but only 23% did. In the current study students had similar difficulty answering a comparable question about the *New York Times*, as none of the three institutions subscribes to *SRDS. Editor & Publisher International Yearbook* is a useful source for this information, but it was the least frequently chosen of the three options provided, with only 3.7% (n = 16) selecting it. Respondents overwhelmingly chose the New York Times website (65.1%, n = 280), and the second place answer, “Internet search,” garnered 18.4% (n = 79) of responses.

Insert Table 5 here

QUESTIONS ASKED IN THIS PROJECT THAT DIFFER FROM PREVIOUS STUDIES

Given this project’s re-inquiry mission, the authors modeled their survey after that used by Healy and his collaborators. To give the study more relevance for contemporary readers, a few questions asked students to describe their use of web-based resources and of library services not included thirty years ago. Specifically, students were asked whether they began library research in Google and how often they used library databases versus free Internet sites, as well as the frequency of use and opinion of reference desk service.

Google as a Starting Point

Echoing Google-usage findings from a previous survey section, 73% (n = 316) of students agreed with the statement “I use Google as a starting point for my library research,” while 14.8% (n = 64) disagreed and 12.2% (n = 53) had no opinion. In a similar vein, 56.8% (n = 245) of respondents (n = 431) said they preferred to use free Internet sites for their library research; again 14.6% (n = 63) disagreed, and 28.5% (n = 123) had no opinion or perhaps merely preferred not to answer.

Preference for Electronic Resources

Reported use of library databases was frequent; 69.1% of students (n = 299) said they used library databases at least monthly, while 19.2% (n = 83) used them at least yearly. Approximately ten percent (n = 45) had never used library databases while fewer than 2% (n = 6) did not know what library databases were. A similar number did not know what free Internet sites were (2.3%, n = 10). Usage of free Internet sites was slightly higher than use of databases: 71% (n = 308) of students said they use free Internet sites at least monthly, with 26% (n = 104) claiming to use them yearly or never. Eighty-six percent of students (n = 374) use Google to begin their research at least monthly.

Service With a Smile

Nearly two-thirds (64%, n = 276) of students consult the reference desk at least once a year, while 34% had never asked for help. However, an overwhelming number of respondents – 83.4% (n = 360) – agreed that “librarians are generally helpful in pointing you to the right direction or giving you the information needed;” only 2.6% (n = 11) disagreed.

DISCUSSION: STUDENTS AND THE LIBRARY, NOW AND THEN

At the heart of a re-inquiry is the effort to understand the role of time, innovation and human progress on the phenomena at hand (e.g. Martin, Schouten & McAlexander, 2006). A comparison of Healy et al. (1975) , Culley et al.(1977), and the results of the study at hand offer the rare opportunity to begin to investigate some of the social, technological and pedagogical changes in students' attitudes and perceptions of the value of academic libraries. Similarities, differences and confounding results discussed below offer important insights for library and business faculty responsible for integrating library instruction into the graduate and undergraduate curriculum.

Similarities: The more they change, the more they stay the same

Students have changed their non-academic use of the library little since 1975. Among Healy et al.'s sample "less than 25% of the undergraduates at all three schools admitted to using the library for pleasure on a frequent basis" and "over 50 % [of graduates] claimed they rarely, if ever, used the library for pleasure" (p. 629). Compared with the current study in which over 60% of students report using the library for pleasure either once a year or never, it appears that use of the library for non-academic library purposes has not increased, although Littlejohn and Benson-Talley's study reported "general reading for personal growth or pleasure" (p. 72), a non-academic use, as one of the top three reasons students used the library.

This is not to say they have decreased their use of the resources: they remain fairly frequent borrowers of library materials that pertain to their academic course work. In Healy et al.'s study "35% of undergraduates and 27% of MBA students rated themselves as frequent borrowers of library materials" (p. 629). In the current study's combined population 33% of respondents reported checking out library materials monthly or more often. Yet apparently students don't always find what they need; students use the library catalog more often than they check out materials; 49% claim to use it at least monthly. Students might not find what they want in the library catalog, or they are using the catalog as a gateway to electronic resources that do not require checkout.

Similarities in students' skills and perceptions of the library over the last 30 years suggest that students still consider the library a place to get on with the business of their education. The stacks still provide a valuable resource and collections have not been replaced by abbreviated and possibly spurious content available with minimal effort of a few keystrokes from the comfort of one's dorm room.

Differences: Changes in Skills and Attitudes.

While students are being encouraged to use the library for course work, the likelihood of reading beyond course requirements has declined since 1975, from 47% thirty years ago (Culley et al., p. 294) to 38% in the current study. Perhaps professors' reading and research requirements are more demanding. On the other hand, students' perception of the library's relevance to their post-graduate lives has increased slightly over the last 30 years. Asked whether knowledge of the library is related to career success, 42% of 1975 undergraduates agreed (Healy et al., p. 630). This position was held by approximately 10% more 21st century students. The current study also found a slight decrease in students' perception that businesspeople rarely use the library; 24% of students, on average, agreed with this statement in 1975 (Culley et al., p. 294) compared to 15.6% in the study at hand. However, attribution of better grades to library use has declined markedly since 1975, from 41% then to 29% now. In 1975 Culley et al. reported that 22% of respondents agreed that students majoring in business know less about using the library; in the current study students were asked to respond to the

reverse statement (“Students majoring in business know more about using the library”), and 43.6% disagreed.

Faculty encouragement of library use has increased since 1975, which might explain the improvement in students’ outlook: in 1975 50% of students agreed that faculty encouraged use (Culley et al., p. 294), while 71.6% agreed in 2006.

Library instruction represents a major difference among the various studies. With 60% of current respondents receiving library instruction once a year, the results of the study at hand contradict Healy et al.’s findings, and also differ from Littlejohn and Benson-Talley’s study: In 1975 only 14% of undergraduates reported frequent or very frequent attendance of a course or “sessions that included instruction in the use of secondary research sources such as the library” (p. 628). In 1990 “only 39% of the respondents had received formal library instruction” (p. 72) at Littlejohn and Benson-Talley’s institution. Participation in library instruction seems to be increasing.

In accordance with more student participation in library-research sessions, the number of students agreeing that “most class projects requiring the use of the library are a waste of time” has declined by more than half from the Healy study, from 19% to 8.4%.

In spite of this increase in library instruction, student use of library resources appears to be slipping: more students in 1975 were familiar with the most relevant business databases than students of today. Business databases remain an under-used resource as today’s students turn to general information sources (i.e., Google) as the first step in their information search. In Healy, et al.’s study, periodical indexes had better familiarity; 53% of 1975 students used Business Periodicals Index “at least half the time” (Culley et al., p. 295), compared to 25.8% using Business Source Premier, a comparable database, in 2006. At the same time, 69% of students in the current study reported using “library databases” at least monthly. The disparity in students using “library databases” versus specific business databases might indicate lack of student awareness of the specific databases, or the inability of students to distinguish between and learn the various names of the business databases they encounter.

In Culley, et al. the authors complained that “the level of student readership of most business periodicals is low”(p. 295), but many more students in 1975 reported reading basic business publications; 86.5% read the *Wall Street Journal* at least occasionally, and 77% read *Business Week*. In 1975 Healy et al. did not ask students if they had heard of certain publications, only if they had read them, and were dismayed by the results: 70.5% of students did not read *Advertising Age*, 76% neglected the *Journal of Marketing*, and 84% were ignorant of the *Journal of Advertising Research*. More of today’s students are aware of the business periodicals and journals, but are not necessarily likely to read them.

Readership of the more popular business publications *Forbes*, *Fortune*, and *Harvard Business Review* was also higher in 1975. In the current study 45% (n = 197) of students read *Forbes*, 47.2% (n = 203) read *Fortune*; and 31.6% (n = 135) read *Harvard Business Review*, compared to 45.5%, 57.5%, and 38.5% reported by Healy, et al (p. 632). Reported reading was highest in both studies for the popular general publications, but again readership has declined since 1975; in the current study more than half of 21st-century students read *U.S. News & World Report*, *Newsweek*, and *Time* at least occasionally, but no more than 10.7% of respondents reported browsing every issue of any of the publications. In contrast, 95% of 1975 students read *Time*, 91.5 % read *Newsweek*, and 80.5% read *U.S. News & World Report* (p. 632). Differences in our survey instrument and the one developed by Healy, et al. make direct comparison of business journal consumption impossible, but it would appear that student use of business periodicals and journals has decreased over the last 30 years. Decreased interest in and reading of business periodicals could be an artifact of the popularity of instant, online sources.

Library faculty can take heart in the results that suggest participation in library instruction seems to be increasing. This may be a function of both better access to and funding for library education and an increase in the number of business faculty who encourage students to use library services.

Business databases remain an under-used resource as today's students turn to general information sources (i.e., Google) as the first step in their information search. Differences between the Healy et al. survey instrument and our instrument make it difficult to determine if today's students are better prepared to answer specific business related questions than were students in 1975, although this study does suggest that students are able to select a useful resource from a list.

Significant differences between respondent populations

Among the three institutions, there is a significant difference in the frequency with which students encounter particular situations, such as how often they are required to use a source held on reserve in the library ($F = 43.265, p < .000$). Students at the private university, UP, report being required to use a reserve item more often ($m = 3.08$) than those at both public universities PSU and OSU ($m = 3.660; m = 3.99$). There is also a significant difference in student encouragement to use library resources ($F = 11.144, p < .000$). Students at UP ($m = 2.65$) report being encouraged to use library resources more frequently than students at both public universities ($m = 2.98; m = 3.08$).

Further ANOVA analyses indicated a significant difference among the three schools in the frequency with which students report using Google as the starting point for their library search, preferring to use free Internet sites and finding librarians helpful, as well as in the readership of three business periodicals, but the authors decided to remove Oregon State University from the analyses as the small response rate provides useful data in aggregate but not in particular. The following results therefore depict differences between Portland State University and University of Portland only.

T-tests ($t = 2.707, p = .008$) indicate that students at PSU ($m = 3.87$) are more likely to use Google as a starting place ($t = 2.043, p = .042$) than students at UP ($m = 3.63$). The authors found no significant difference in free internet site usages between PSU and UP students..

There is a significant difference in the frequency with which students experience librarians to be generally helpful in pointing students in the right direction or giving information needed. T-tests ($t = -2.427, p = .017$) indicate that UP students ($m = 4.24$) are more likely to find university librarians helpful ($t = -3.403, p = .001$) than do students at PSU ($m = 3.98$). These results might disclose UP's residential character; since UP students live on campus, and use the library rather than off-campus sites for studying, they might be more familiar with librarians and their services.

Faculty and librarian efforts to encourage students to read academic journals often meet resistance. While students at all schools appear to explore these resources with less enthusiasm than educators would like, there are some significant differences within the sample. In this survey section, higher means indicate greater awareness. T-tests ($t = 2.135, p = .035$) show that students at UP ($m = 1.63$) are more likely to read the *Journal of Advertising Research* (JAR) ($t = -2.483, p = .014$) than students at PSU ($m = 1.46$). Likewise, UP students ($m = 1.61$) read the *Journal of Marketing* (JM) significantly more ($t = -2.009, p = .045$) than PSU students ($m = 1.48$).

Students are also encouraged to read the *Harvard Business Review* (HBR), an academic/management cross-over periodical. Students read HBR at significantly different rates ($F = 9.909, p = .000$). T-tests indicate that PSU students ($m = 2.26$) read HBR more frequently ($t = 3.625, p = .000$) than UP students ($m = 2.01$).

CONCLUSION

The most important difference between the results from the current study and those from the original is the impact of technologies on the information-seeking behaviors of business students. With the explosion of free Internet sites in recent years, the expanding availability of free Internet resources, and the ever improving power of search engines as represented by Google, students are presented with and sometimes overwhelmed by many options in addition to traditional library resources. Students prefer to use free Internet sites because they provide easy access (one search access instead of drilling down multiple menus and search terms) and instant gratification (“good enough” mentality). Students are drawn to online sources because of efficiency and time management, as well. The percentage of students who work while in college has increased over the past thirty years, and the number of hours they work has also increased (National Center for Education Statistics, 2007). To improve the perceived efficiency of library databases, librarians might closely watch search engine development and leverage improvements, such as Google Scholar, to provide better access for students.

Readership of business publications has dropped possibly because there are many competing sources of information including homepages of major media sites that feature business news. As future professionals responsible for keeping abreast of evidence-based improvements to business practice, students should know how to evaluate scholarly articles and identify their wisdom. Students might think they are getting necessary information from their textbooks, but they should also know how to read the primary academic literature cited in these sources. Inasmuch as trade publications such as *Harvard Business Review* present business concepts in a more readable style, it is distressing that students are not reading this material either. Students from the current study are not alone; a 1997 study of doctoral students found fewer than half had ever read several journals in the “marketing and society” field (Wilkie & Moore-Shay).

Authors in multiple fields within business (e.g. Cohen, 2007; Cordell, Langdon & Lemoine, 2006; Kranacher, 2007; McKenzie, Wright, Ball, and Baron, 2002; Nyilasy & Reid, 2007) have examined the gap between academia and practice and concluded that academia risks becoming irrelevant to practice unless changes are made, either to the nature of scholarly research (Crosier, 2002; McKenzie et al., 2002) or to the business school curriculum (Pavia, 2006; Stanton, 2006). Librarians can help by introducing students to a variety of periodicals and by encouraging students to set up alerts or RSS feeds to receive regular updates on their topic or favorite journals. Students might also be encouraged to read more scholarly business literature after an appeal to students’ sense of cost-benefit analysis, and the research benefits they might supply to their future employers.

In some cases, even if the library resources are more efficient (e.g., SRDS over NYT site), students are still drawn to the Internet, partly because of the sense of familiarity, and partly because it is “online” and saves a trip to the physical library. Compared to students in the original study, students in the current study are less apt to agree that the use of “library” resources are positively correlated to academic achievements (grades), probably also because they perceive that there are plenty of other resources out there and they can provide information just as good, if not better. It is counter-intuitive for librarians to see that business databases are under-utilized even though they have come a long way in terms of usability and full text availability. We attribute this phenomenon to the saturation of free business information sources online (regardless of quality), the refinement of search engines, and the lack of awareness of specific database strengths. Librarians can assert their expertise in this area by creating good pathfinders that incorporate useful free Internet sites (e.g., census.gov) instead of succumbing to the “library vs. internet” mentality.

When searching for research materials to help them complete assignments, the students in this

study seem to operate according to George Zipf's "principle of least effort" and to engage in "satisficing," a term coined by Herbert Simon in 1957 to describe how decision makers locate minimally acceptable information to satisfy their needs rather than the optimal. Atkinson & Figueroa (1997) developed a theory of business students' searching behavior; taking into account the students' background knowledge the authors suggested that students perform a cost-benefit analysis when searching, varying their attention to external and internal constraints according to a particular assignment's importance.

In addition to Atkinson and Figueroa (1997), other researchers (Griffiths & Brophy, 2005; Prabha, Connaway, Olszewski & Jenkins, 2007; Tennant, 2001; among the many authors in this area) identified several factors influencing a student's decision to discontinue searching regardless of the quality of retrieved information:

Time constraints (Atkinson & Figueroa)

Feeling that they have enough information (Atkinson & Figueroa)

Assignment requirements (i.e. the number of citations required or of pages in the assignment, an assignment's value in terms of final grade) (Atkinson & Figueroa; Prabha et al.)

Difficult or confusing interfaces (Prabha et al., Tennant)

Technical problems, i.e. slowness (Griffiths & Brophy)

Within the searching environment, Atkinson & Figueroa identified additional concerns. They determined that their subjects' online searching was "minimal," as the students examined only a few pages of search results (p. 66), and that during group work one student is typically the "research specialist" (p. 70) who funnels information to his or her teammates; the specialist's abilities develop but the teammates' do not.

The results of this comparative study offer implications for the continuing development of library instruction for business students. The use of library resources is closely related to students' awareness of such resources, which is often a positive result of successful library instruction, as well as the encouragement and support from the teaching faculty. Librarians, therefore, should focus on collaborating with the teaching faculty to make library instruction more effective and efficient by highlighting the uniqueness of library resources.

Many academic libraries have initiated programs that create and strengthen faculty-librarian collaboration. Successful collaboration models include 1) course-specific integration; 2) delivering instruction by using learning communities, and 3) developing campus-wide information literacy programs (Arp, Woodard, Lindstrom, & Shonrock, 2006).

Course-specific integration of information literacy, often involving the collaboration between a subject librarian/liaison and a specific department/school, is the most common approach and sometimes regarded as the most effective (Farber, 1999). Librarians offer "one-shot" bibliographic instruction, or a tiered module that spans multiple sessions and targets all learning objectives of the course (Dorner, Taylor, & Hodson-Carlton, 2001; Gandhi, 2004). Librarians have different levels of involvement. Oftentimes librarians are just guest speakers. Even if they may meet and work closely with students individually or as a group outside of the classroom, they are not necessarily involved in course or assignment design. However, when librarians are involved as co-instructor, they not only participate in curricular development, but also teach class and grade assignments (Hearn, 2005; Lapis, 2007; Peary & Ernack, 2004; Black, Crest, & Volland, 2001).

The three libraries involved in the current study already have extensive in-class instruction sessions. In order to make faculty aware of the study's findings and their implications, as well as deepen faculty-librarian collaboration to improve business students' information literacy, librarians

need to be bolder in marketing library services to the faculty, especially the concept of information literacy.

Librarians can initiate further integration of library content by embedding a customized course page into the teaching platform (traditional class Web page or WebCT/Blackboard), offering online library instruction through an interactive tutorial or video/audio, and introducing just-in-time help services such as 24/7 Chat Reference via cooperative networks.

If librarians and faculty have a close working relationship, librarians can also offer to embed themselves into the online learning environment (e.g., being present in discussion forums to answer any questions related to information literacy). A co-teaching relationship is ideal, and especially favorable if it results in a business course that has a multiple-session series on library skills pertinent to business research; or better, a new course that emphasizes the effective use of information specifically for freshmen business majors, such as the one described in Matthies' 2004 article (as cited in Arp, Woodard, Lindstrom, & Shonrock, 2006).

Collaborating with other campus units such as the technology and instructional support departments (Black, Crest, & Volland, 2001) or being part of an Information Commons if available at the institution, is also an effective way to provide seamless integration of library content and presence into teaching, learning, and the campus's general academic activities. The collaboration may also result in innovative instructional models that, instead of singling out library content as an isolated component, embrace it as an integrated, organic part.

A more structured and ambitious solution would be for librarians to strongly advocate for creating a campus-wide information literacy program reaching students at the freshmen level but also customized to specific disciplines. In their 2006 article, Arp et al. commended the California State University (CSU) for developing a "remarkable" program that "encompasses all the universities in the CSU system, endeavoring to integrate information-literacy instruction in the entire undergraduate curricular by training faculty and providing them with the tools to incorporate information literacy into their instruction" (p. 22). Such an endeavor requires collaborating not only with the teaching faculty, but also the university administration. It's often challenging, as Arp et al. (2006) pointed out,

While librarians continue to be included in the teaching mission of the university on a course-by-course basis, it is still rare that the inclusion of the librarian is integral to the mission of the course or the curriculum in any major way. (p. 21)

However, we foresee that universities will increasingly recognize the importance and relevance of information literacy and a campus-wide initiative in which librarians play a crucial role will be proposed and implemented on more and more campuses.

Findings from this study show that students are more aware of library resources than they were in 1975. Also, students continue to value both librarians and the information they obtain from libraries. College-age students were the most aware of library information sources of all age groups according to the OCLC report *College Students' Perceptions of Libraries and Information Resources*. However, as noted by the report's companion web page, and as confirmed in this study, "awareness of library resources does not always translate into high usage"(OCLC, 2005).

FURTHER STUDIES

Future inquiries might examine differences between majors within the business school rather than concentrating on marketing students. While marketing students are the most frequent information users at the authors' libraries, students from other business majors have equally valid, but perhaps less understood, research needs. Exploring the different attitudes and research needs of

undergraduates and graduates would also bear fruit, as well as possible the differences between participating institutions. Bibliographic analysis could determine how many subscription-based, or how many scholarly, resources students rely on for their class projects. Researchers might also examine the quality of papers or other coursework for students using library resources vs. those that only rely on free internet sites.

The difference in makeup of each study's set of authors is striking and could lead to further research. Healy and his colleagues were all business professors, yet they published their article in a journal of librarianship. Littlejohn and Benson-Talley were both librarians when they completed their study, and the current authors are all librarians but one. The collaborative imperative concept has been examined often in library journals, and yet library research seems to be conducted primarily by librarians. Researchers might examine research authors' affiliations to determine if Healy's article was anomalous in its time and if contemporary writers represent collaborative interdisciplinary teams.

The authors also asked students where they read the few periodicals that they do report reading – online in free sites, via library databases, or in print – and plan to report these results in a future publication.

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17-21.

TABLE 1. Reported Encounters with Research-Related Situations

	Daily	Weekly	Monthly	Yearly	Never	Don't know what this is
Using Google as a starting point for research (435)	23.7	33.6	28.7	7.8	5.7	.5
Using free Web sites to complete an assignment instead of library databases (432)	8.1	26.4	36.8	13.2	13.2	2.3
Instructor encouragement to use library resources (435)	3.2	27.6	49.2	16.1	2.5	1.4
Using the library for non-academic purposes (436)	2.5	17.0	16.3	17.0	45.6	1.6
Using library databases (433)	2.1	23.1	43.9	19.2	10.4	1.4
Using course reserves (435)	.7	12.9	34.5	30.3	19.5	2.1
Borrowing library items (428)	.7	7.8	24.5	33.9	32.2	.7
Taking a course or attending library instruction sessions (433)	.5	3.9	11.5	60.0	20.3	3.7
Using the library catalog (435)	.5	12.6	35.9	22.8	25.7	2.5
Using the consortium catalog (435)	.5	3.4	14.0	18.4	47.6	16.1
Using Interlibrary Loan (434)	.2	1.4	7.1	19.4	61.8	10.1
Consulting the reference desk (431)	.2	3.7	19.7	40.4	34.1	1.9

TABLE 2. Student Usage of Databases Held by All Three Institutions

Database name and how often students use it (N)	At least half the time	Sometimes	Rarely	Never	Don't know what this is
Business Source Premier (431)	25.8	20.0	11.8	33.9	8.6
LexisNexis Academic (426)	12.9	29.6	15.5	35.2	6.8
Wall Street Journal Index (425)	9.9	20.2	25.4	38.4	6.1
Stat-USA (426)	0.5	6.8	14.1	64.8	13.8

TABLE 3. Student Agreement with Statements about Library Use

Statement and level of agreement (N)	Strongly Disagree	Disagree	No Opinion	Agree	Strongly Agree
I use Google as a starting point for my research. (433)	2.8	12.0	12.2	45.3	27.7
Librarians are generally helpful... (432)	.5	2.1	14.1	56.3	27.1
Knowing how to use library resources is necessary for academic success (433)	2.1	11.5	9.5	51.7	25.2
I prefer to use free Internet sites for my library research. (431)	1.6	13.0	28.5	40.1	16.7
Faculty encourage use of the library and its services. (429)	.2	9.8	18.4	55.7	15.9
I read only what I have to read to complete assignments. (433)	2.8	21.9	13.2	46.7	15.5
.... is necessary for career success (434)	3.2	20.3	27.4	36.9	12.2
Those who use the library usually have better grades than those who don't. (431)	6.5	20.6	43.9	24.4	4.6
Business majors know more about library research than students in other fields. (433)	11.3	32.3	44.3	8.5	3.5
Most class projects requiring library use are a waste of time. (431)	12.3	53.8	25.5	7.2	1.2
Business people rarely use the library as an information source. (431)	9.3	38.5	37.6	13.7	.9

TABLE 4. Reported Awareness / Reading of Business Periodicals

Periodical title and reported awareness and reading habits (N)	Never heard of	Heard of but never read	Occasionally scan	Browse every issue
Time (428)	.5	21.0	67.8	10.7
Newsweek (430)	3.3	22.6	65.1	9.1
Wall Street Journal (430)	.5	26.7	65.6	7.2
Business Week (432)	5.3	36.8	51.4	6.5
Fortune (430)	4.9	47.9	43.0	4.2
Economist (431)	15.3	47.1	33.9	3.7
Forbes (429)	6.1	48.0	42.7	3.3
U. S. News & World Report (429)	8.4	38.9	49.7	3.0
Harvard Business Review (427)	14.8	53.6	29.5	2.1
Advertising Age (422)	69.7	22.3	7.6	.5
Journal of Advertising Research (430)	52.6	40.0	7.2	.2
Journal of Marketing (430)	50.7	43.3	5.8	.2
Marketing Professional (bogus title) (430)	56.0	36.5	7.2	.2

TABLE 5. Responses to Multiple-Choice Questions

(Items 1-5) Where would you go to find... (N)																							
<p>1. ... The name of a top-level marketing manager (429)</p> <table border="0"> <tr><td>Firm Website</td><td>46.4</td></tr> <tr><td>Business Source Premier</td><td>25.2</td></tr> <tr><td>I don't know</td><td>16.6</td></tr> <tr><td>LexisNexis Academic</td><td>6.3</td></tr> <tr><td>Other</td><td>5.6</td></tr> </table>	Firm Website	46.4	Business Source Premier	25.2	I don't know	16.6	LexisNexis Academic	6.3	Other	5.6	<p>2.... The population of Portland, Oregon (426)</p> <table border="0"> <tr><td>U.S. Census Bureau</td><td>53.8</td></tr> <tr><td>City Website</td><td>31.2</td></tr> <tr><td>Other</td><td>10.1</td></tr> <tr><td>An Almanac</td><td>2.8</td></tr> <tr><td>I don't know</td><td>2.1</td></tr> </table>	U.S. Census Bureau	53.8	City Website	31.2	Other	10.1	An Almanac	2.8	I don't know	2.1		
Firm Website	46.4																						
Business Source Premier	25.2																						
I don't know	16.6																						
LexisNexis Academic	6.3																						
Other	5.6																						
U.S. Census Bureau	53.8																						
City Website	31.2																						
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An Almanac	2.8																						
I don't know	2.1																						
<p>3. ... Balance sheet data on public companies (420)</p> <table border="0"> <tr><td>The company's website</td><td>35.2</td></tr> <tr><td>Yahoo! Finance</td><td>26.2</td></tr> <tr><td>SEC EDGAR database</td><td>25.2</td></tr> <tr><td>I don't know</td><td>9.5</td></tr> <tr><td>Other</td><td>3.8</td></tr> </table>	The company's website	35.2	Yahoo! Finance	26.2	SEC EDGAR database	25.2	I don't know	9.5	Other	3.8	<p>4. ... The cost of a one-page, black and white ad in the New York Times (430)</p> <table border="0"> <tr><td>New York Times website</td><td>65.1</td></tr> <tr><td>Internet Search</td><td>18.4</td></tr> <tr><td>I don't know</td><td>9.1</td></tr> <tr><td>Editor & Publisher</td><td></td></tr> <tr><td>International Yearbook</td><td>3.7</td></tr> <tr><td>Other</td><td>3.7</td></tr> </table>	New York Times website	65.1	Internet Search	18.4	I don't know	9.1	Editor & Publisher		International Yearbook	3.7	Other	3.7
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Appendix: Questionnaire used at the University of Portland

The University of Portland Clark Library is researching business students' use and knowledge of library resources. We greatly appreciate your taking the time to answer the questions on this survey, as your answers will improve faculty knowledge of student research.

PRIVACY NOTICE. All the information gathered from the survey will be used for general statistical purposes only and will be held strictly confidential.

A. Please tell us how often you have encountered the following situations.

1= Daily; 2= Weekly; 3= Monthly; 4= Yearly; 5= Never; 6= Don't know what this is

(Circle the item that applies)	Daily	Wkly	Monthly	Yrly	Never	Don't know
1. used the University library for non-academic, i.e. social or personal purposes	1	2	3	4	5	6
2. been required to use a source held on Reserve in the library	1	2	3	4	5	6
3. had a teacher encourage you to use library resources	1	2	3	4	5	6
4. taken a course or attended sessions that included library instruction	1	2	3	4	5	6
5. used the library catalog	1	2	3	4	5	6
6. used Summit	1	2	3	4	5	6
7. used Interlibrary loan	1	2	3	4	5	6
8. used the library's media center	1	2	3	4	5	6
9. borrowed library materials	1	2	3	4	5	6
10. used free Internet sites to complete an assignment instead of library databases	1	2	3	4	5	6
11. Used Google as the starting point for a research project	1	2	3	4	5	6
12. used library databases	1	2	3	4	5	6
13. consulted the library's reference desk regarding an assignment or project	1	2	3	4	5	6

B. How frequently do you consult the following business-related library databases when you search for marketing data:

1= At least half the time; 2= Sometimes; 3= Rarely; 4= Never; 5= Don't know what this is

(Circle the item that applies)	At least ½	Sometimes	Rarely	Never	Don't Know
1. ABI Inform	1	2	3	4	5
2. Business Source Premier	1	2	3	4	5
3. Directory of Corporate Affiliations	1	2	3	4	5
4. EconLit	1	2	3	4	5
5. LexisNexis Academic	1	2	3	4	5
6. New York Times	1	2	3	4	5
7. Standard & Poor's NetAdvantage	1	2	3	4	5
8. Stat-USA (National Trade Data Bank)	1	2	3	4	5
9. TableBase	1	2	3	4	5
10. Wall Street Journal Index	1	2	3	4	5
11. Other, not on this list. Please name:	1	2	3	4	5
12. _____	1	2	3	4	5
13. _____	1	2	3	4	5

C. Tell us how much you agree or disagree with the following statements:

(Circle the item that applies)

1= Strongly Disagree (SD); 2= Disagree (D); 3= No Opinion (NO); 4= Agree (A); 5= Strongly Agree (SA)

	SD	D	NO	A	SA
1. Knowing how to use library resources is necessary for academic success	1	2	3	4	5
2. Knowing how to use library resources is necessary for career success	1	2	3	4	5
3. Students majoring in business know more about using the library's resources than students in most other fields.	1	2	3	4	5
4. I use Google as a starting point for my library research	1	2	3	4	5
5. Business faculty encourage the use of the library and its services.	1	2	3	4	5
6. I read only what I have to read to complete assignments.	1	2	3	4	5
7. Those who use the library usually have better grades than those who don't.	1	2	3	4	5
8. Most class projects requiring the use of the library are a waste of time	1	2	3	4	5
9. Businesspeople rarely use the library as an information source.	1	2	3	4	5
10. Librarians are generally helpful in pointing you to the right direction or giving you the information needed	1	2	3	4	5
11. I prefer to use free internet sites for my library research	1	2	3	4	5

D. How often do you read these major business periodicals?

(Circle the item that applies)

1= Never heard of (NH); 2= Heard of but never read (NR); 3= Occasionally scan (OS); 4= Browse every issue (BE)

Title	NH	NR	OS	BE
1. Advertising Age	1	2	3	4
2. Business Week	1	2	3	4
3. Economist	1	2	3	4
4. Forbes	1	2	3	4
5. Fortune	1	2	3	4
6. Harvard Business Review	1	2	3	4
7. Journal of Advertising Research	1	2	3	4
8. Journal of Marketing	1	2	3	4
9. Marketing Professional	1	2	3	4
10. Newsweek	1	2	3	4
11. Time	1	2	3	4
12. U.S. News & World Report	1	2	3	4
13. Wall Street Journal	1	2	3	4

E. Where do you read these major business periodicals?

1= Print (physical) copy, in library (PL)

2= Print (physical) copy, non-library; (PNL)

3= Online, through library database; (OL)

4= Online, at publisher's website (OP)

5= I don't read this publication (DR)

(Circle the item that applies)

Title	PL	PNL	OL	OP	DR
1. Advertising Age	1	2	3	4	5
2. Business Week	1	2	3	4	5
3. Economist	1	2	3	4	5
4. Forbes	1	2	3	4	5
5. Fortune	1	2	3	4	5
6. Harvard Business Review	1	2	3	4	5
7. Journal of Advertising Research	1	2	3	4	5
8. Journal of Marketing	1	2	3	4	5
9. Marketing Professional	1	2	3	4	5
10. Newsweek	1	2	3	4	5
11. Time	1	2	3	4	5
12. U.S. News & World Report	1	2	3	4	5
13. Wall Street Journal	1	2	3	4	5

F. Please tell us which of these options would be your first choice to answer the following questions:

1. ... the name and title of the top-level marketing manager of a large manufacturing firm?

- a. Business Source Premier – Datamonitor Company Profile
- b. LexisNexis Academic
- c. Firm website
- d. Other, please specify _____
- e. I don't know

2. ... the population of Portland, Oregon? (or other city!)

- a. City website
- b. United States Census Bureau
- c. An almanac
- d. Other, please specify _____
- e. I don't know

3. ... balance sheet data on public companies?

- a. Yahoo! Finance
- b. The company's website
- c. Securities and Exchange Commission EDGAR database
- d. Other, please specify _____
- e. I don't know

4. ... the cost of a one-page, black and white ad in the New York Times?

- a. Internet search
- b. Editor & Publisher International Yearbook
- c. New York Times website
- d. Other, please specify _____
- e. I don't know

(SURVEY CONTINUES ON NEXT PAGE)

5. ...the number of households headed by single women in the zip code around the university?

- a. United States Census Bureau American Factfinder website
- b. Monthly Labor Review
- c. Chamber of Commerce
- d. Other, please specify _____
- e. I don't know

6. Which of these journals is peer-reviewed?

- a. Wall Street Journal
- b. Harvard Business Review
- c. Industrial Marketing Management
- d. Other, please specify _____
- e. I don't know

G. Thank you for your answers! Please provide us with some information about yourself:

- 1. What is your status (circle one): Graduate Undergraduate
- 2. If Undergraduate, what is your year (Junior, Senior, etc.): _____
- 3. Are you (please circle): **Full-time** **Part-time**
- 4. How many years have you been affiliated with the [institution]? 1 2 3 4 5
- 5. **Business majors:** What is your area of concentration within your major? (please circle)
- 6. **Global Business** **Marketing & Management**
- 7. **Other majors:** What is your major? _____
- 8. Are you a (check all that apply) **International** [] **Transfer** [] student?